

**Notice of Allowability**

Application No.

09/916,148

Examiner

Russell L. Guill

Applicant(s)

BUCKMASTER ET AL.

Art Unit

2123

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed December 5, 2005.
2. ☒ The allowed claim(s) is/are 22-24, 26-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to the applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Scott Denko on February 2, 2006.
3. The application has been amended as follows:
  - a. Claim 22, line 1, the words "electronic systems" have been replaced with the words --electronic system--.
  - b. Claim 26, line 4, the words "the physical hardware in the event" have been replaced with the words --the physical target hardware in the event--.
  - c. Claim 26, line 4, the words "the physical hardware by the target" have been replaced with the words --the physical target hardware by the target--.
  - d. Claim 29, line 1, the words "electronic systems" have been replaced with the words --electronic system--.
  - e. Claim 29, line 2, the words "hardware has" have been replaced with the words --hardware that has--.
4. Claims 22 - 24 and 26 - 29 are allowed.
5. The following is an examiner's statement of reasons for allowance:
  - a. Regarding **claim 22**, while Nguyen teaches a method with a target processor adapted to execute a target program, the target processor being coupled to a target hardware that has a physical portion and a simulated portion, this

reference taken either alone or in combination with the prior art of record does not teach the aforementioned method with a target processor adapted to execute a target program, the target processor being coupled to a target hardware that has a physical portion and a simulated portion specifically including: determining when the target processor is attempting to access the simulated portion of the target hardware by inputting monitored address signals into a mapping memory and outputting a stored map result from a corresponding address in the mapping memory, for each of the monitored address signals, from the mapping memory; in response to determining that the target processor is attempting to access the simulated portion of the target hardware, suspending execution of the target program; and in response to determining that the target processor is attempting to access the simulated portion of the target hardware, processing output signals present on a plurality of the externally accessible terminals in a hardware simulator, in combination with the remaining elements and features of the claimed invention. It is for these reasons that the Applicant's invention defines over the prior art of record.

b. Regarding **claim 29**, while Nguyen teaches a method with a target processor adapted to execute a target program, the target processor being coupled to a target hardware that has a physical portion and a simulated portion, this reference taken either alone or in combination with the prior art of record does not teach the aforementioned method with a target processor adapted to execute a target program, the target processor being coupled to a target hardware that has a physical portion and a simulated portion specifically including: determining when the target processor is attempting to access the simulated portion of the target hardware by inputting monitored address signals into a mapping memory and outputting a stored map result from a corresponding

address in the mapping memory, for each of the monitored address signals, from the mapping memory; combining the stored map result with a target clock counter through a logical OR function; resetting the target clock counter with an acknowledge signal from the physical portion of the target hardware, in combination with the remaining elements and features of the claimed invention. It is for these reasons that the Applicant's invention defines over the prior art of record.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

*Conclusion*

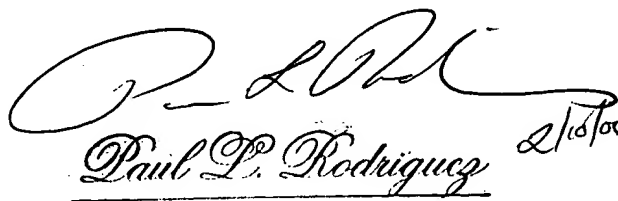
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell L. Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday - Friday 10:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RG

Russ Guill  
Examiner  
Art Unit 2123

  
Paul P. Rodriguez 2/16/09  
Primary Examiner  
Art Unit 2125